

ABSTRACT OF THE DISCLOSURE

Disclosed is a plasma processing apparatus provided with a plasma chamber in which a plasma is generated by electron cyclotron resonance, and a sample chamber for housing a sample to be processed with the plasma. The plasma chamber is provided with a protection tube for protecting the inner walls of the plasma chamber from deposition of products resulting from the plasma processing. The protection tube is composed of a plurality of sub-tubes formed in relation to the temperature distribution at the time of the plasma processing.